Infrastructure Partnership Program

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Program Directors

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ITIB Infrastructure Committee Briefing

IT INFRASTRUCTURE PARTNERSHIP

VITA   NORTHROP GRUMMAN

The IT Infrastructure Partnership Program is a multi-year, multi-phase effort to stabilize, optimize and transform the people, processes and technologies for IT infrastructure services that support citizen services
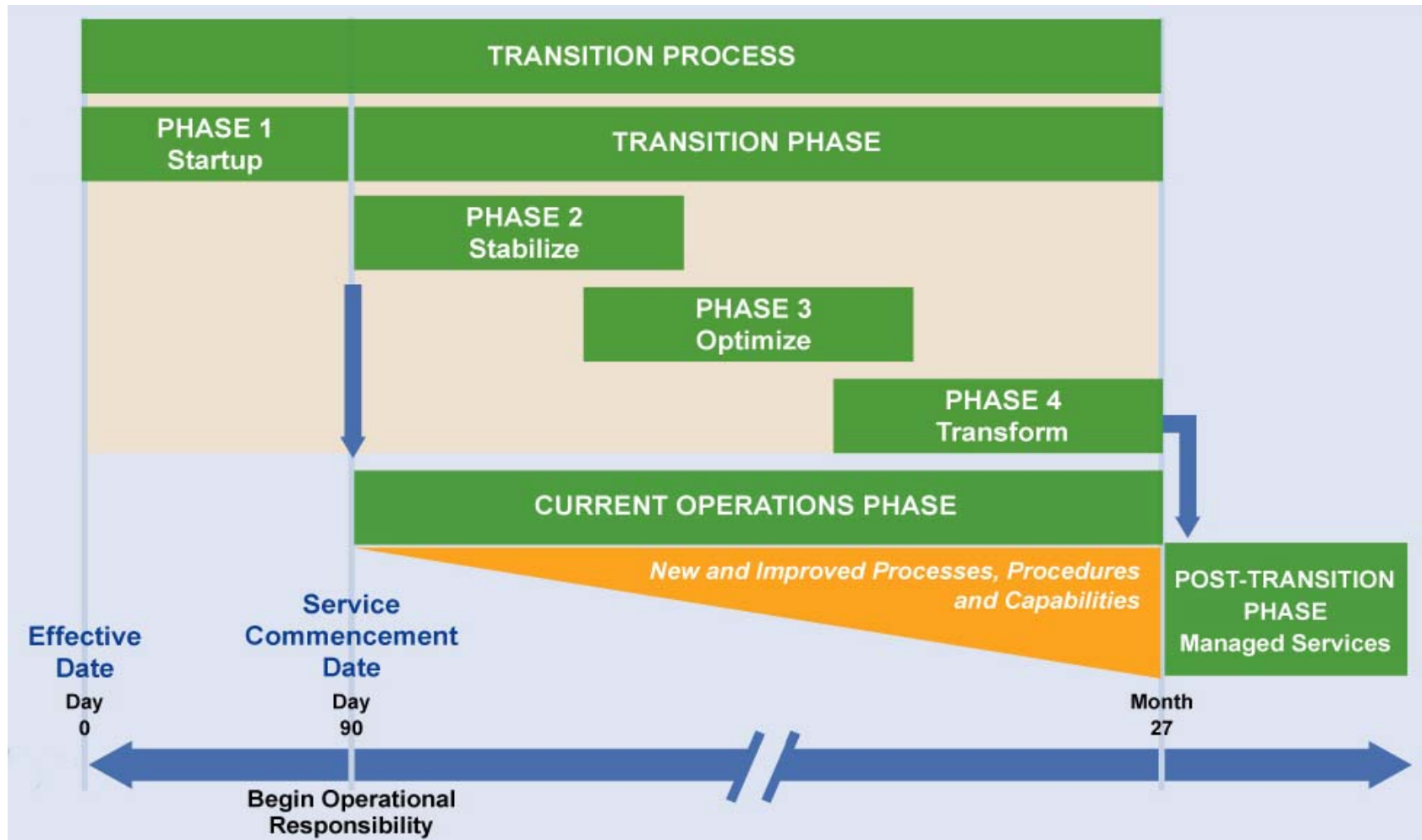
Employee Transition Results
67% Acceptance

Offer Type*	Total		Accept		Decline		No Response		Vol Termed	
	Total	%	Count	%	Count	%	Count	%	Count	%
Full Time	812	95.6%	540	66.5%	178	21.9%	61	7.5%	33	4.1%
Part Time	1	0.1%	1	100.0%	0	0.0%	0	0.0%	0	0.0%
Casual	36	4.2%	26	72.2%	0	0.0%	2	5.6%	8	22.2%
Total	**849**	**100%**	**567**	**66.8%**	**178**	**21.0%**	**63**	**7.4%**	**41**	**4.8%**

- Offer period ended September 12
  - 567 employees have transitioned
  - 1 offer still out due to leave of absences (LOA)
  - 1 offer to be made in the future due to current LOA

- Annual leave transferred without issue

- Numerous "on-boarding" activities and communications channels established and evolving

Stabilize

- Completed
  - Established the Operations Working Group
  - Built Root Cause Analysis (RCA) process, completed 28 RCAs
  - Bolstered operations organization with project, communications, and change management personnel
  - Held four in-scope manager Q&A calls
  - Disseminated and implemented 10 standard infrastructure practices
  - Published Central Operations Quality of Service (QoS) Report
  - Started collection of customer agency facing metrics
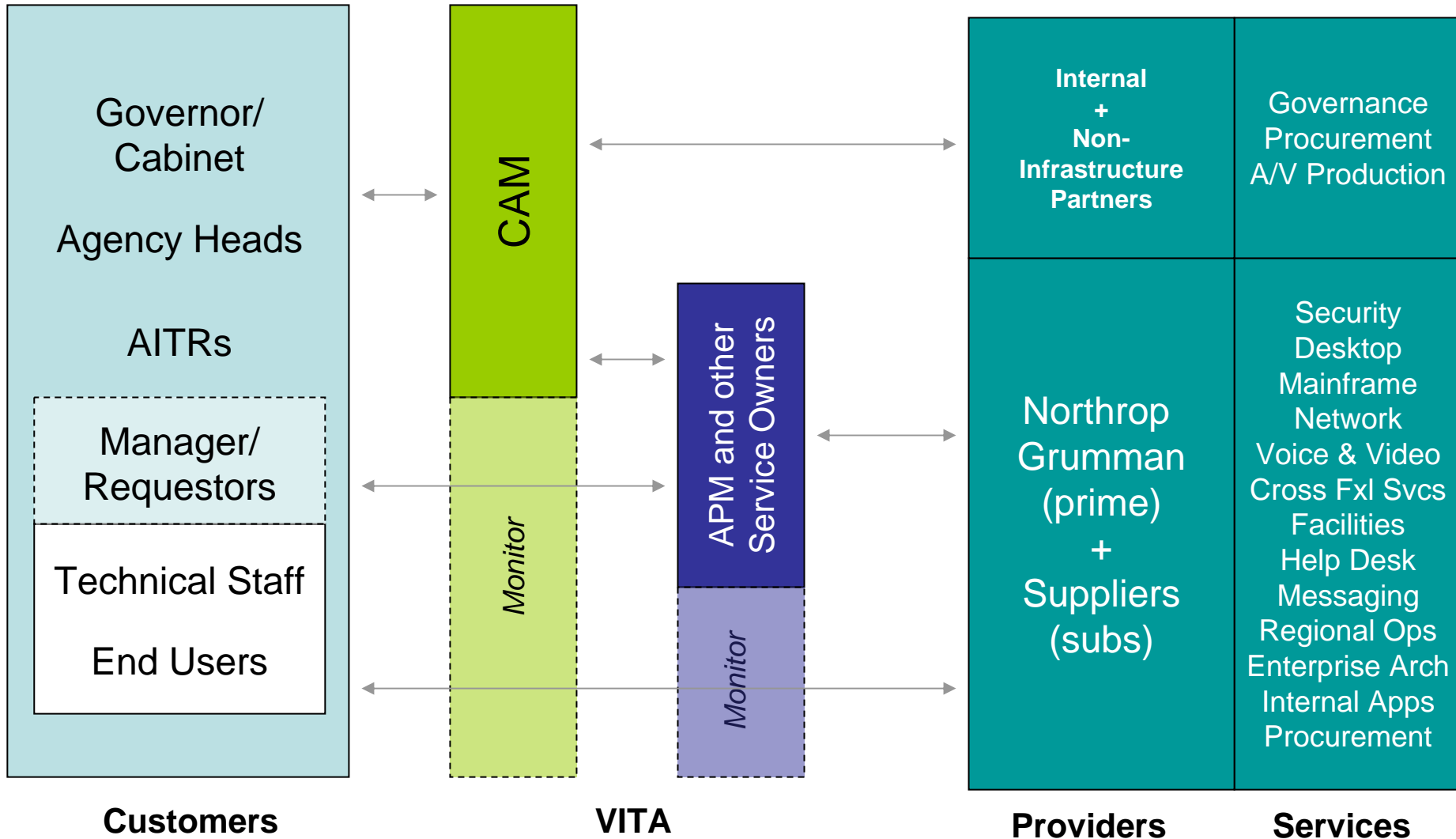 - Implemented fixes to correct central operations Yellow and Red metrics

- Planned
  - 10/16 -11/8 - 10 regional NG new employee training meetings
  - 10/31 – Complete evaluation of infrastructure against CIS Configuration Standards
  - 11/15 - In-scope manager off-site – management team alignment
  - 11/30 – Build process for flowing information on vital service interruptions
  - 11/30 - Build Emergency Operations IT support plan
  - 12/15 – Include all customer agency facing metrics in the QoS Report
  - Early 2007 – Consolidate service support contracts

Transition Challenges

- **Move Operations from primarily distributed/agency-focused model to centrally-focused model**
  - Description
    - Effort now primarily performed in agency buildings and focused on agency support
    - Eventually move help desk, break/fix, server, network, security monitoring, e-mail to the Commonwealth Enterprise Solutions Center (CESC) and the Southwest Enterprise Solutions Center (SWESC) and focus on enterprise support
  - Near-term efforts
    - Moved East and West regions to geographic model, Capital region will move in early 2007
    - Accelerating interim help desk consolidation
    - Accelerating move of customer agencies to interim, existing single e-mail

- **Gain better understanding customer satisfaction at the agency level**
  - Description
    - Currently getting informal, ad hoc comments
    - No overall view of agency satisfaction
  - Near-term efforts
    - Started collection of agency facing metrics, first report December 2006
    - Customer Account Managers (CAMs) providing agency satisfaction assessment
    - Customer agency survey planned for early 2007

"Customer" Touchpoints in Light of Partnership

Customers

- Governor/Cabinet
- Agency Heads
- AITRs
- Manager/Requestors
- Technical Staff
- End Users

VITA

- CAM
- Monitor
- APM and other Service Owners
- Monitor

Providers

- Internal + Non-Infrastructure Partners
- Northrop Grumman (prime) + Suppliers (subs)

Services

- Governance
- Procurement
- A/V Production

- Security
- Desktop
- Mainframe
- Network
- Voice & Video
- Cross Fxl Svcs
- Facilities
- Help Desk
- Messaging
- Regional Ops
- Enterprise Arch
- Internal Apps
- Procurement

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Initial, Notional Order for Help Desk and Desktop Transformation

Agency	Secretariat	Number of Sites	Workstation Count (as of 5/10/06)	Cumulative Workstation Count
Veterans Services, Department of	Public Safety	26	106	106
Museum of Natural History, Virginia	NR	1	45	151
Minority Business Enterprise, Department of	C & T	4	27	178
Criminal Justice Services, Department of	Public Safety	2	194	372
Museum of Fine Arts, Virginia	Educ	4	250	622
Correctional Education, Department of	Public Safety	58	2971	3593
Corrections, Department of	Public Safety	115	6984	10577
Juvenile Justice, Department of	Public Safety	142	1509	12086
Game and Inland Fisheries, Dept. of	NR	21	656	12742
Charitable Gaming Commission	Admin	1	55	12797
Forestry, Department of	C & T	74	408	13205
Labor & Industry, Department of	C & T	13	396	13601
Mental Health, Mental Ret. & Sub. Abuse Svcs., Dept. of	HHR	15	4907	18508

IT Infrastructure Services

Domain	Functional Area	September 2006				Post Transform	Coverage Action	Performance Action
		Prior Coverage	Current Coverage	Measures	Performance	SLAs		
End User Services	Help Desk	36%	36%	5		19	1/07 - 37% 4/07 - 42% 7/07 - 47%	Addressed Aug ASA and CAR - Reassigned HD staff to peak hours Red FCR correcting definition
	Messaging	18%	21%	2		10	Nominal increase	
	Desktop	3%	13%	3		14	1/07 - 18% 4/07 - 28% 7/07 - 38%	
Data Center Services	Server	6%	6%	2		21	1/07 - 70%	
	Mainframe	100%	100%	2		13		
Network Services	Data	90%	90%	1		25		
	Voice	0%	0%	0		19	VOIP coverage and Verizon metrics	
Security Services	Security	60%	100%	1		9	Initial reporting of security incidents	

Incidents

Distribution of Incident Severity for July - Sept 2006

Critical, 1%

High, 16%

Low, 20%

Medium, 63%
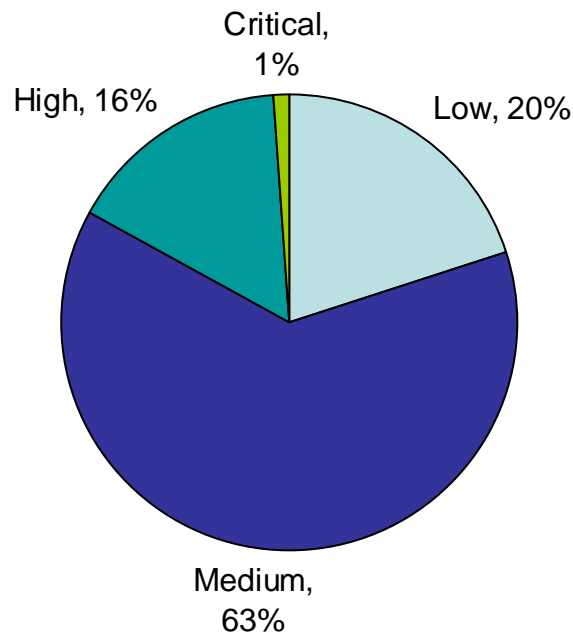
- Since service commencement:
  - 8,674 total incidents, 74 critical
  - 28 RCAs prepared and corrective action identified

- Significant incidents for period:
  - 7/6, 12 Hours, VDOT: Poorly written script caused all employees to not be able to access applications
  - 7/9, 7 Hours, VDOT: Improper Raid Array configuration caused VDOT website to go down when a drive failed
  - 7/23, 32 Hours, VEC: Improper server restart after maintenance caused the VEC website to go down
  - 7/25, 6 Hours, VDEM: Antivirus software upgrade caused external e-mails to not be passed to VDEM
  - 8/8, DSS, DMV, VRS: A file storage parameter was improperly changed in Jan 06 causing permanent file deletion after 180 days
  - 9/2, 80 Hours, DGIF: Verizon circuit failure caused DGIF website to be unavailable to the public

End User Services Transition

As Is

- 40+ separate help desks
- 20 incident management systems
- Limited call metrics
- Desk side agency support centric
- Multiple manufactures and support models
- 40+ email systems
- 40+ Global Address Lists
- Unsecured Messaging

To Be
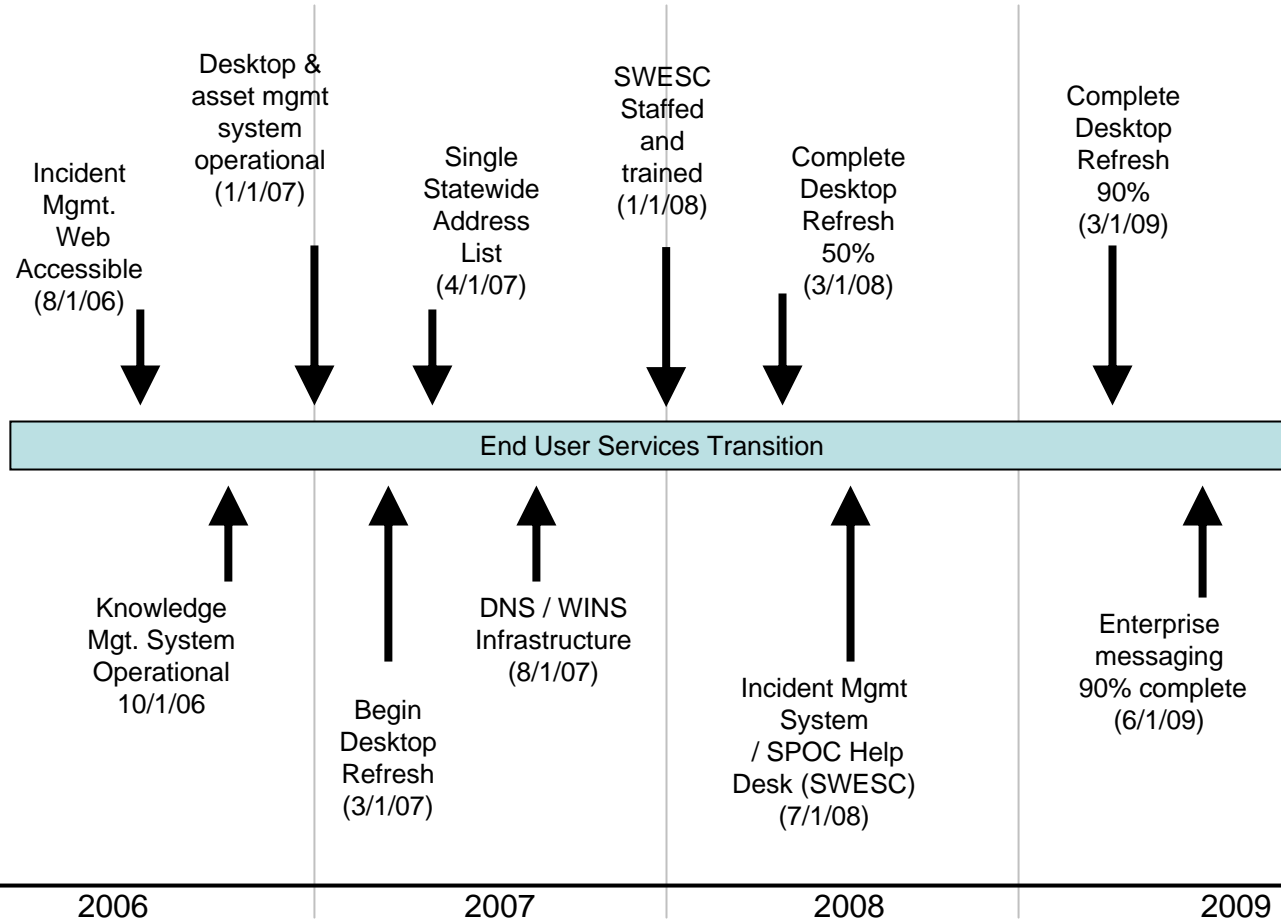
- Enterprise help desk
- Single Incident management system
- Established call metrics
- Regionalized management services
- Standard systems, centralized software delivery, remote support
- Centralized messaging system
- Single Global address list
- Secure Messaging

End User Services Transition

Incident Mgmt. Web Accessible (8/1/06)

Desktop & asset mgmt system operational (1/1/07)

Single Statewide Address List (4/1/07)

SWESC Staffed and trained (1/1/08)

Complete Desktop Refresh 50% (3/1/08)

Complete Desktop Refresh 90% (3/1/09)

Knowledge Mgt. System Operational 10/1/06

Begin Desktop Refresh (3/1/07)

DNS / WINS Infrastructure (8/1/07)

Incident Mgmt System / SPOC Help Desk (SWESC) (7/1/08)

Enterprise messaging 90% complete (6/1/09)

2006   2007   2008   2009

Notes:
- SWESC – Southwest Enterprise Solutions Center, Russell County
- SPOC – Single Point of Contact Help Desk solution

End User Services Status and Progress

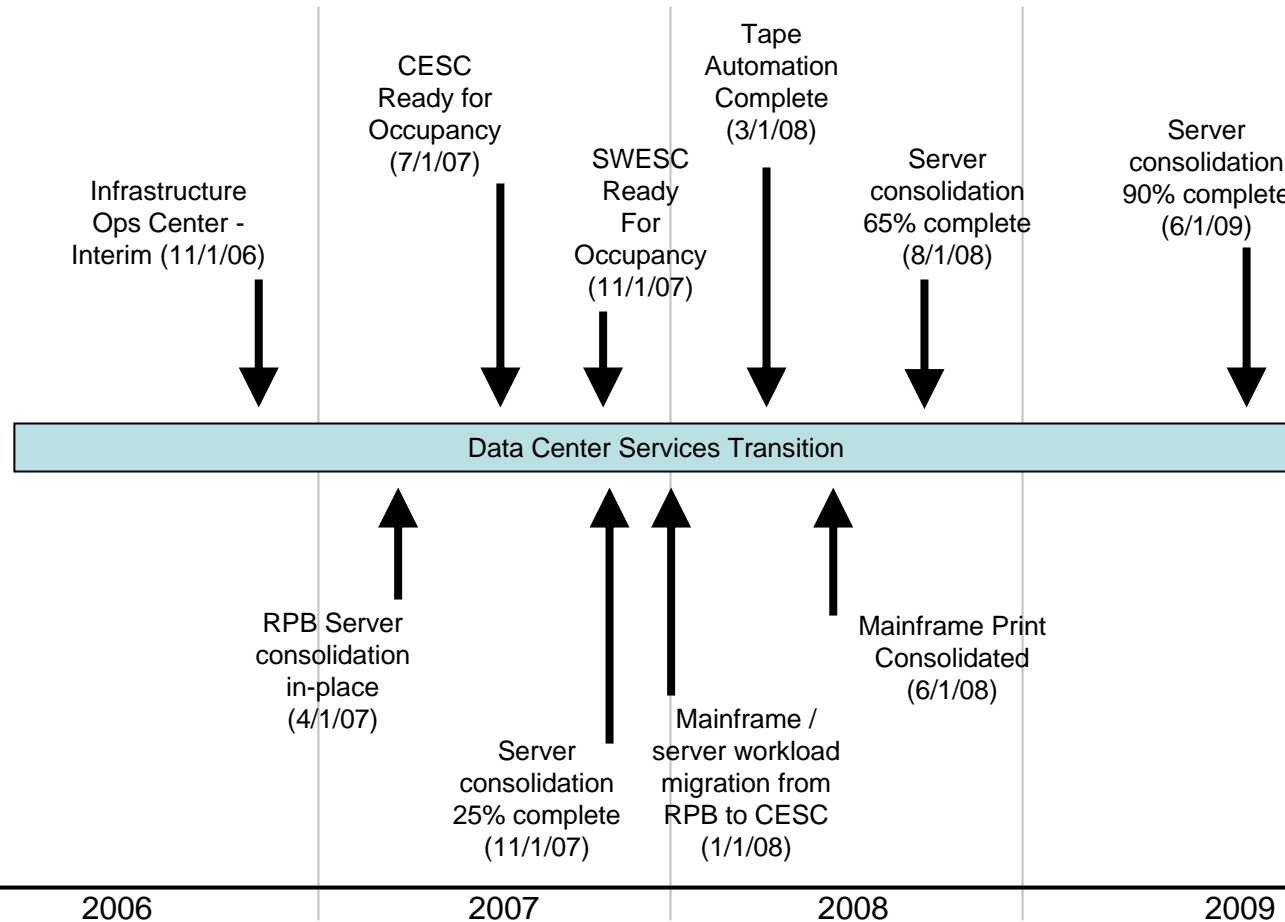| Quarter	Milestone	Due	Status
Q3 2006	Incident Management Web Accessible	8/1	Complete
	Altiris backend system pre-configured	9/30	Complete
Q4 2006	Knowledge Management System Operational	10/1	Delivered – Preparing for Post Live Testing
	Desktop & Laptop Selection	11/1	On Schedule
	Desktop Core Image Design Complete	11/30	On Schedule
Q1 2007	Desktop & asset mgmt system operational	1/1	On Schedule
	Begin Desktop Rollout	3/3	On Schedule

Data Center Services Transition

As Is

To Be

- 3000+ servers 75% distributed throughout agencies
- 3 mainframes located at RPB and VDACs
- Minimal performance monitoring
- Disaster recovery within 72 Hours
- No standard server tools or processes
- Multiple point storage solutions
- Remote high volume print operations
- Manual operations and tape management

- Consolidated storage servers and tape
- 75% centralized versus agency based server location
- Enterprise monitoring performance data
- 24 Hour disaster recovery
- Centralized operations and printing
- Automated tape processing and operations

CESC Ready for Occupancy (7/1/07)

Tape Automation Complete (3/1/08)

Infrastructure Ops Center - Interim (11/1/06)

SWESC Ready For Occupancy (11/1/07)

Server consolidation 65% complete (8/1/08)

Server consolidation 90% complete (6/1/09)

Data Center Services Transition

RPB Server consolidation in-place (4/1/07)

Server consolidation 25% complete (11/1/07)

Mainframe / server workload migration from RPB to CESC (1/1/08)

Mainframe Print Consolidated (6/1/08)

2006 · 2007 · 2008 · 2009

Notes:
- CESC – Commonwealth Enterprise Solutions Center, Chesterfield County
- SWESC – Southwest Enterprise Solutions Center, Russell County
- RPB – Richmond Plaza Building Data Center

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Data Center Services Status and Progress

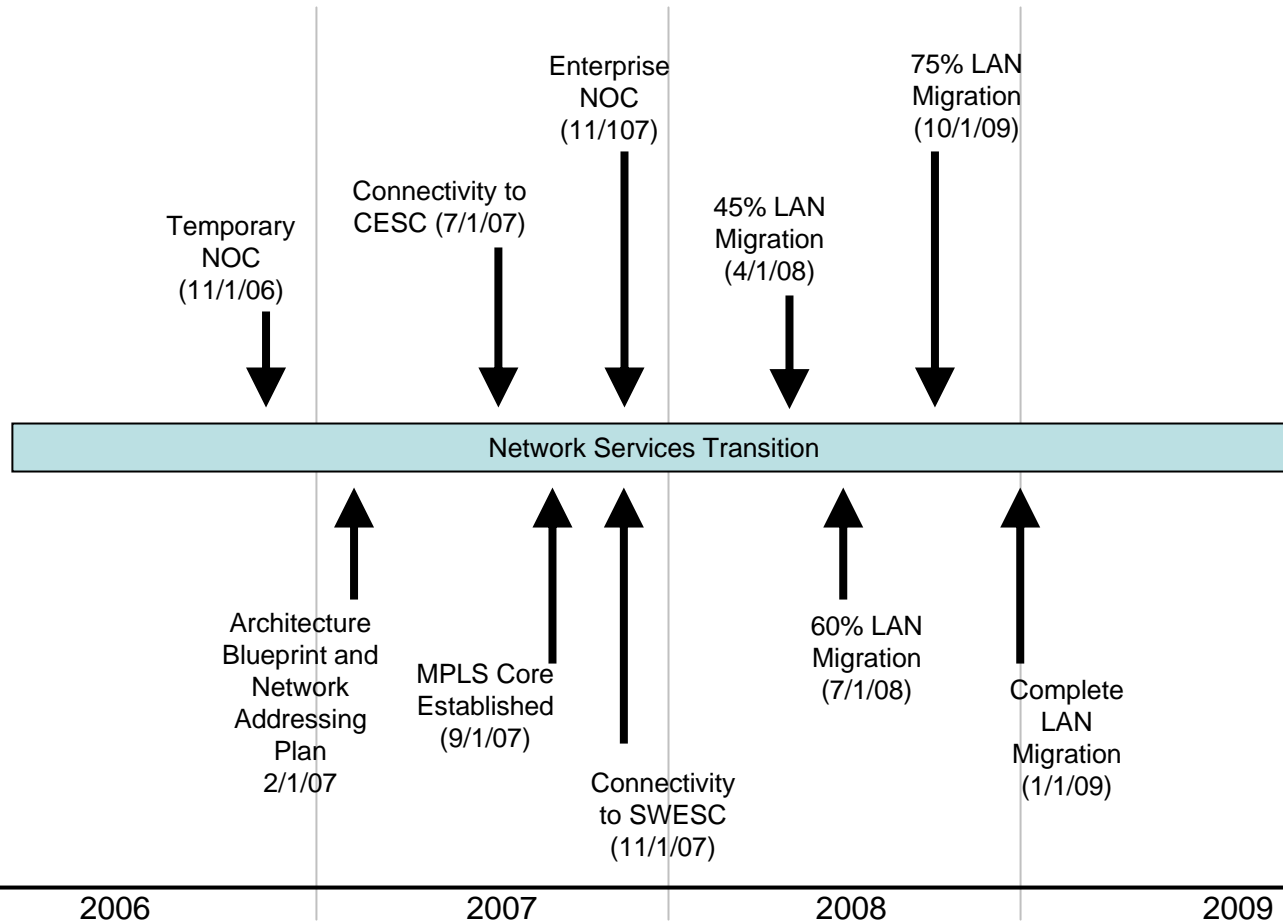| Quarter	Milestone	Due	Status
Q3 2006	HP Open View Lab Hardware	9/15	Complete
	Complete Data Center Precast Walls	9/30	Complete
Q4 2006	SWESC Groundbreaking	10/27	On Schedule
	Begin Mainframe Print Consolidation Project	10/30	On Schedule
	Infrastructure Ops Center (Interim)	11/1	On Schedule
Q1 2007	Begin RPB Server Consolidation in Place	1/15	On Schedule
	RPB Server consolidation in-place complete	4/1	On Schedule

Network Services Transition

As Is

To Be

- Agency Centric Approach to Network Design, Management Operations
- Network Solution Not Scalable
- Varying Levels of Network Technology
- Multiple Connections (85+) to the Internet
- IP Address Duplication Across Agencies
- Frame Relay / ATM Network

- Enterprise-Managed Single Multi-Service Network
- Centralized Network Operations Center
- Reliable, Scalable and Secure Network Infrastructure
- Converged Communications (e.g., VoIP, QoS, MPLS / VPN)
- Increased Performance and SLAs
- Consolidated Internet Connections and WAN Links

Temporary NOC (11/1/06)

Connectivity to CESC (7/1/07)

Enterprise NOC (11/107)

45% LAN Migration (4/1/08)

75% LAN Migration (10/1/09)

Network Services Transition

Architecture Blueprint and Network Addressing Plan 2/1/07

MPLS Core Established (9/1/07)

Connectivity to SWESC (11/1/07)

60% LAN Migration (7/1/08)

Complete LAN Migration (1/1/09)

2006   2007   2008   2009

Notes:
- NOC – Network Operations Center

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Network Services Status and Progress

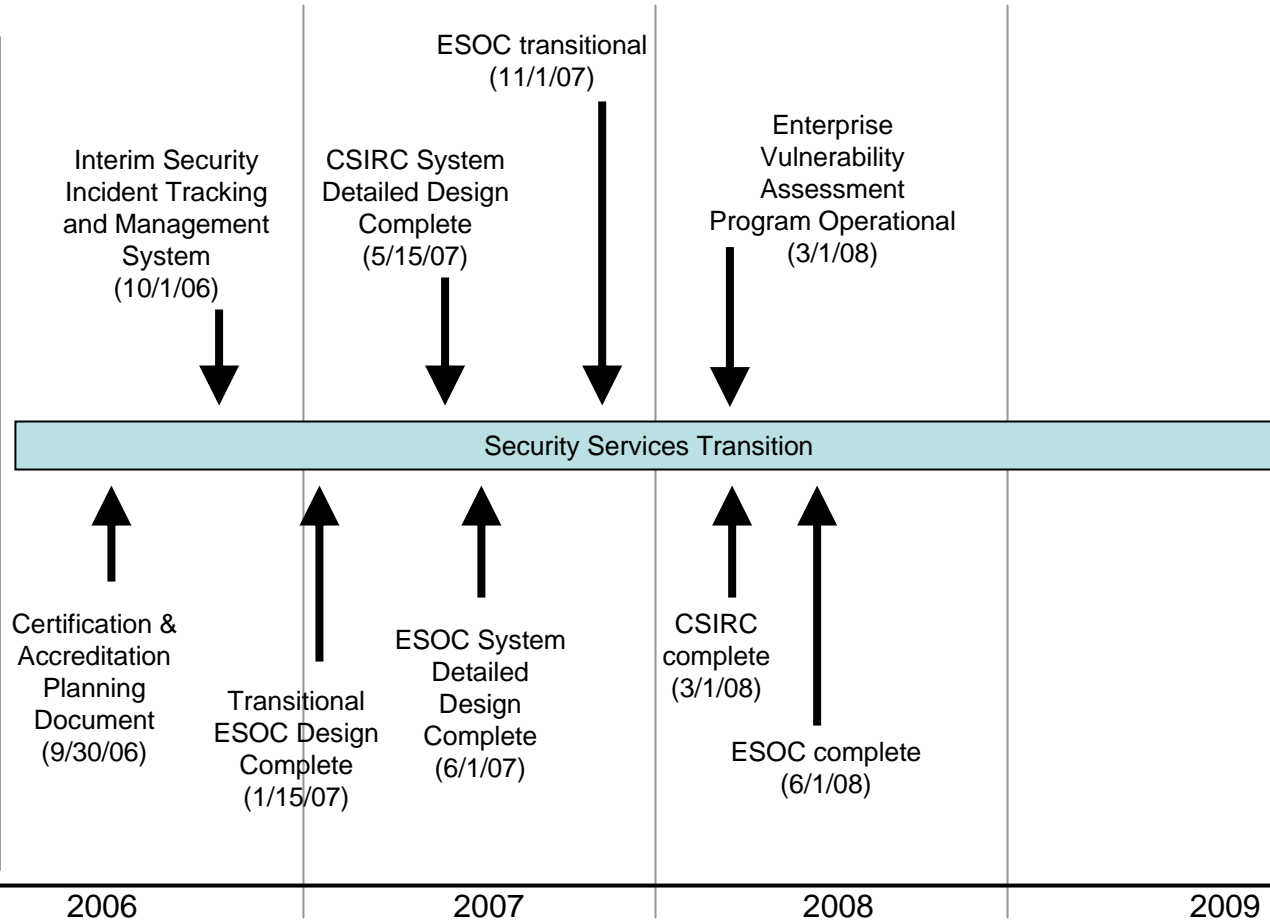| Quarter	Milestone	Due	Status
Q3 2006	Complete Temporary NOC Requirements	9/15	Complete
	Draft Network Deployment Order Plan	9/30	Complete
Q4 2006	System Requirements	10/20	On Schedule
	Deploy Temporary NOC	11/1	On Schedule
	Initial MPLS Network High Level Design	12/1	On Schedule
Q1 2007	Architecture Blueprint & Network Addressing Plan	2/1	On Schedule
	MPLS Detailed Design	3/1	On Schedule
	Richmond MAN Detailed Design	3/31	On Schedule

Security Services Transition

As Is

To Be

- 85 or More Internet Entrances to Defend to Varying Degrees, 40+ intrusion detection systems
- Various Levels of Security Monitoring
- Various Levels of Security incident Response
- No Enterprise Wide View of IT Security Status
- No Central Management of Enterprise Security Environment

- Two Internet Gateways, Strongly Defended
- 24x7 Enterprise Security Posture
- Centralized Highly Trained Incident Response Team
- Enterprise Security Dashboard Governance, Operational Control
- Centralized Management, Standardized Enterprise Security Protection

ESOC transitional (11/1/07)

Interim Security Incident Tracking and Management System (10/1/06)

CSIRC System Detailed Design Complete (5/15/07)

Enterprise Vulnerability Assessment Program Operational (3/1/08)

Security Services Transition

Certification & Accreditation Planning Document (9/30/06)

Transitional ESOC Design Complete (1/15/07)

ESOC System Detailed Design Complete (6/1/07)

CSIRC complete (3/1/08)

ESOC complete (6/1/08)

2006　　2007　　2008　　2009

Notes:
- CSIRC – Computer Security Incident Response Center
- ESOC – Enterprise Security Operations Center

Security Services Status and Progress

Quarter	Milestone	Due	Status
Q3 2006	Begin ISG Design	9/1	Complete
	Security Certification/ Accreditation Planning Document	9/30	Complete
Q4 2006	Operational Interim Security Incident Tracking System	10/1	Delivered for Acceptance
	Internet Secure Gateway High Level Design Complete	11/01	On Schedule
	Transitional ESOC Design	12/15	On Schedule
Q1 2007	Internet Secure Gateway Detailed Design Complete	1/15	On Schedule
	Acquire/Receive Transitional ESOC Equipment	2/28	On Schedule

Information Security Responsibility Requires Clarification

Source	Item	Agency	VITA	CIO
§2.2-2009.A	CIO shall direct development of security policies, procedures & standards			X
§2.2-2009.B	Designate a govt entity to oversee, plan & coordinate periodic security audits			X
§2.2-603.F	The director … shall report to the CIO all known incidents … within 24 hours…	X		
§2.2-2009.E	Receive incident reports from directors			X
COV ITRM Policy Sec 500-02	Responsible for security of Agency's data & for taking appropriate steps to secure Agency IT systems & data via dev. of an Agency IT security program	X		
COV ITRM Policy Sec 500-02	Administer the COV IT Security Program & periodically assess compliance		X	
COV ITRM Policy Sec 500-02	Designate ISO & Maintain Agency IT security program sufficient to protect the Agency's IT systems	X		
COV ITRM Policy Sec 500-02	Establish a program of IT security safeguards & submit exception requests to CISO	X		

Security – Role Definitions continued

* In scope

Source	Item	Agency	VITA	CIO
COV ITRM Policy Sec 500-02	Evaluate & respond to exception requests		X	
Roles&Resp. (R&R) Matrix	Inform of security service capabilities & features		X	
COV ITRM Policy Sec 500-02	Establish an IT security awareness & training program & audit plan	X		
R&R Matrix	Establish &maintain infrastructure security policies, procedures, standards & architecture		X*	
R&R Matrix	Establish &maintain application security policies, procedures, standards & architecture	X		
R&R Matrix	Manage infrastructure security		X*	
R&R Matrix	Provide assurance re: infrastructure security			X*
R&R Matrix	Manage security of applications	X		
R&R Matrix	Perform business impact analysis	X		
R&R Matrix	Perform risk assessment (RA)	X		
R&R Matrix	Participate in RA for infrastructure		X	

Security Awareness Initiatives

- Issuance of Information Security Policy & 2 Standards

- Reconstituting Information Security Officers Advisory Group (ISOAG)

- Publishing monthly Cyber Security News Tips with OCP

- Reminders in Leadership Communiqué, Network News & Service Bulletin

- Publishing alerts

- Supporting to individual agency inquiries

- Developing guidance documents for new policies and standards

Delivering Results

- **Economic Growth**

  – $1M invested toward technology training programs at UVA-Wise

  – 433 new high-tech jobs in Southwest Virginia

  – 631 jobs in Chesterfield County including VITA and Northrop Grumman employees

  – $65M investment in nearly 300,000 SF of new technology management facilities

- **Employee Transition**

  – Job offers to 850 employees on May 1 with enhanced benefits and professional growth opportunities

    - 66.7% acceptance rate; 33.3% remain VITA "managed" employees

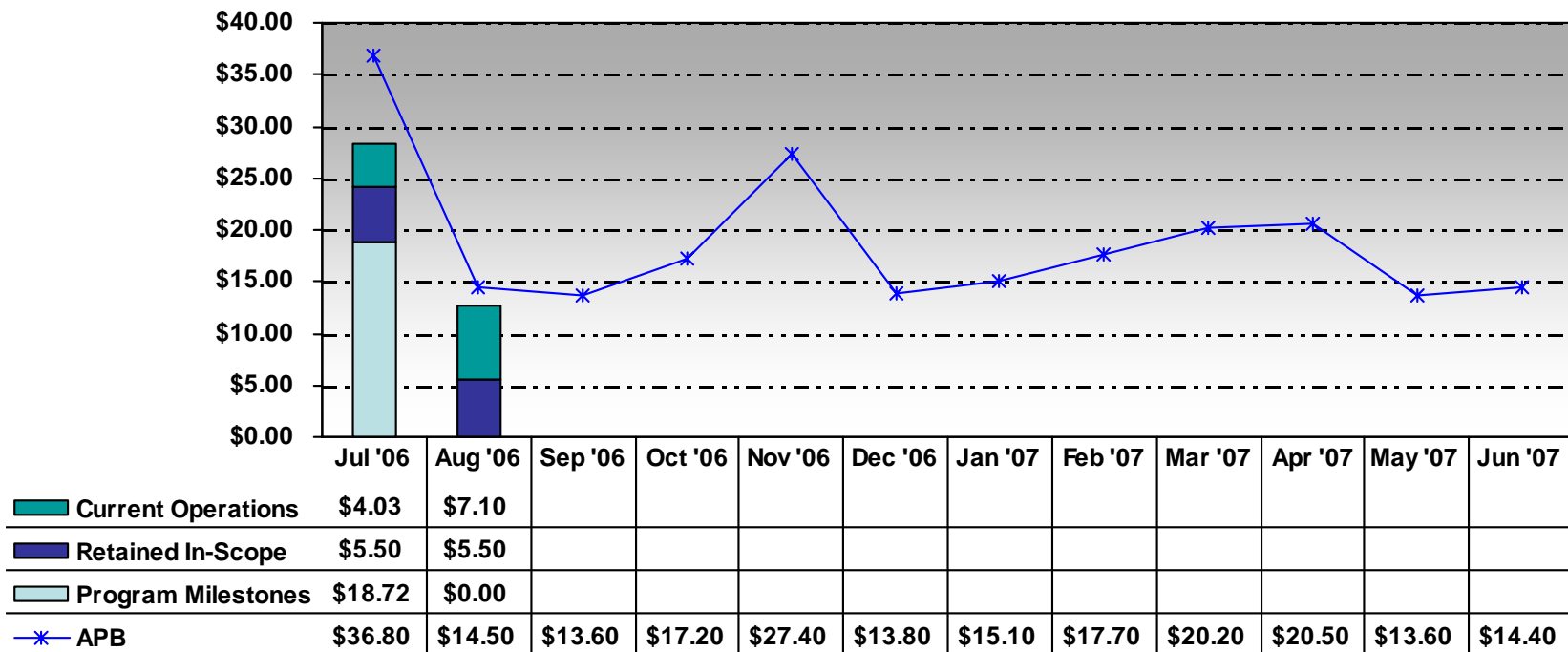- **Smooth Transition on Service Commencement Day, July 1**

  – Uninterrupted service delivery

SWAM Results

	Jan - Jun 06	July-06 Spend Amount	August-06
VDMBE Certified SWAM Sub-contractor	$ 722,352	$ 663,310	$ 1,031,020
Self Report as SWAM Sub-contractor	$ 403,440	$ 546,718	$ 200,552
	$ 1,125,792	$ 1,210,028	$ 1,231,571
Large Businesses		$ 2,190,529	$ 4,653,656
		$ 3,400,557	$ 5,885,227
SWAM Percentage		35.6%	20.9%

Partnership Finance

Current Partnership Expenses ($M)

	Jul '06	Aug '06	Sep '06	Oct '06	Nov '06	Dec '06	Jan '07	Feb '07	Mar '07	Apr '07	May '07	Jun '07
Current Operations	$4.03	$7.10										
Retained In-Scope	$5.50	$5.50										
Program Milestones	$18.72	$0.00										
APB	$36.80	$14.50	$13.60	$17.20	$27.40	$13.80	$15.10	$17.70	$20.20	$20.50	$13.60	$14.40

*Expenses include Paid & Invoiced expenses
*VITA Retained In-Scope is an estimated figure
*APB estimate based on a monthly spend rate totaling $225M and adjusted for Milestone timing

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Revenue Impact Approach

Description of Proposed Adjustments	Potential $$ Impact	Status
Contractual Adjustments	$2 - 6M	Performance Bond Adjustment; Contract Pre-Paid (Agreement on approach finalizing cost impacts)
Technology Refresh	$1 – 3.5M	Desktop refresh to 5 years and other components to as needed with same SLA's (Agreement on approach for PC's and evaluating financials on other components)
VOIP Acceleration	$1 – 3M	Proposal and approach being evaluated
Help Desk ASA Adjustment	$500K	Proposal and approach being evaluated
Server Consolidation and Messaging Approach	$1 – 2M	Proposal and approach being evaluated
Range of Potential Value of Proposed Adjustments	**$5.5 – 15M**	

Comprehensive Infrastructure Agreement (CIA)
Status of Amendments

- **21 modifications agreed to in principle during Interim Phase; 11 additional modifications subsequent to SCD**

- **11 modifications executed by 7/1/06**
  - Joint Verification, Definition of CIA, Revised COLA Formula, Charge Back System Review, Revised Application of Credit Language, Carry-over leave for employees, commencement of lease payments, payment of transition phase invoice, SWAM Reporting, Customer Service Point of Contact, and Change of Richmond Facility Name

- **4 additional modifications executed by 10/1/06**
  - Performance Bond, Managed Employees Expense, State vehicle use and Initial Reports

- **8 modifications under review**
  - Time frame for completion of RPB relocation efforts, employee qualification and verification, overall fee limitation, Shared and Assumed Contracts, leaseback option for NG, allowance for facility, Federal Tax Exemption and Approval for Deloitte & Touche to be the Auditor for NG audits

- **5 modifications being drafted**
  - removal of in-scope employees from baselines, Fee Schedules, Voice over IP (VoIP), Extension of delivery date for technical SOW's and NG POC for receipt of amendment requests

- **VITA and NG to review and discuss the following additional items**
  - Milestone dates and payments based on revised revenue projections
  - Prepayments, depreciation, eVA fees

IV&V

- CACI concluded its initial review and delivered its formal report 8/31 – assessed ITP as maturity level 2 (Repeatable)

- ITP could be expected to achieve level 3 (Defined) in next 8-12 months

- 180 positive findings, 138 minor negative

- ITP action plan to sustain positive findings and address minor negative findings:

  - Evolve senior management teams, committees and forums with respective charters and prioritized processes

  - Document and communicate those prioritized processes

  - Establish consistent work methods producing artifacts and evidence of the processes and their outputs

- First follow-up review by CACI scheduled Nov 27 – Dec 14